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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,038	08/30/2001	Jorg Bredthauer	Mo-6555 STA-171	5584

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BAYER CHEMICALS CORPORATION  
100 BAYER ROAD  
PITTSBURGH, PA 15205

EXAMINER
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WESSMAN, ANDREW E

ART UNIT	PAPER NUMBER
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1742

13

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/944,038

Applicant(s)

BREDTHAUER ET AL.

Examiner

Andrew E Wessman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### DETAILED ACTION

1. Claims 1-12 remain for examination. Claim 1 has been amended. Claims 13 and 14 are cancelled.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 6, 7, 9, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kronenwetter et al.

Kronenwetter et al. is applied to the claims for the reasons set forth in paper No. 9, paragraph 3.

With regards to the amendment to claim 1, the amendment is for clarity of the claim and does not affect the scope of the claim.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kronenwetter et al.

Kronenwetter et al. is applied to the claims for the reasons set forth in paper No. 9, paragraph 5.

***Response to Arguments***

6. Applicant's arguments filed March 28, 2003 have been fully considered but they are not persuasive. In the remarks, applicant argues:

- (1) Kronenwetter et al. only teaches sodium and potassium as impurities present below the detectable limits of 5 to 10ppm, and does not teach the requirement of a second alkali metal as claimed in the claimed ratio; and
- (2) The alkali metal mixture gives unexpected results with respect to FSSS average particle size.

With regards to applicant's argument (1), applicant's assertions that the sodium and potassium present are only present as impurities are incorrect, as the paragraph cited by applicant as indicating the compounds are impurities clearly states that the tungsten oxide starting powder may contain other minor ingredients in the form of "impurities or additives". Table 1 then shows that sodium, potassium, and lithium are all used as dopants in various amounts in the oxide blends. While Kronenwetter et al. indicates that lithium is the preferred compound for doping the oxide, table III shows that all of the various alkali metal compounds have a positive effect on the FSSS. Because it is known that all three alkali metal compounds have some kind of positive effect in the reaction, and there is at least some level of all the alkali compounds in the mixture in all the reactions, applicant's claimed invention is substantially the same as the prior art. Applicant must show that some unexpectedly beneficial synergistic effect is witnessed

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when the particular mixture of alkali metals is used in order to have any claim of patentability, because any fair reading of Kronenwetter et al. would inform one skilled in the art that the use of any one of the alkali metal compounds would have a beneficial effect on the process, and any mixture of alkali metals would also have a beneficial effect on the reaction.

With regards to applicant's argument (2), there is insufficient evidence in the record to suggest an unexpected result with respect to FSSS average particle size due to applicant's particular levels of alkali metals in the mixture. Evidence showing the criticality of the claimed composition compared to compositions outside the range of the claimed invention are needed in order to show such an unexpected result.

### ***Conclusion***

7. U.S. Patent No. 6,524,366 to Seegopaul et al. discloses a process similar to but not reading on applicant's claimed invention, and is cited for informational purposes only.
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew E Wessman whose telephone number is (703)305-3163. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703)308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

AEW  
June 4, 2003

  
ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700